Adjusting Our Lives To Stretch Energy

By Glenda M. Herman

"Use it up, wear it out, make it do, fix it up or do without." This World War II motto is just as appropriate today as it was 40 years ago. Many families are trying to cope with less energy and higher prices by "making do."

Now is the time to seriously examine current American values, attitudes, and behaviors toward energy use. Changing these values, attitudes, and behaviors to bring about a less energy-intensive lifestyle will take time and effort. Most people resist change, especially when it looks less appealing than what they presently have. Yet, a new way of life less dependent on energy may be not only necessary, but even allow us to develop a higher quality of living.

For several reasons, the energy conservation idea must take the lead. The first reason is time. In general, conservation can produce results more quickly than other energy options. The second reason is cost. Conservation costs less than developing other energy alternatives. And finally, the time for action has come. The American family can play a direct part in conservation.

In the simplest terms, conservation means the wise use of resources. We could eliminate a lot of waste and still not do without things we consider basic to our way of life. To conserve, we must understand the ways we use energy daily.

We use energy directly and indirectly. The major direct energy consumption methods are home heating and transportation. Indirectly, the consumer pays for fuel resources used by industry in production and shipping of goods, and for services provided by businesses. Some families have tried to control their direct energy uses.

Most families have felt the impact of rising fuel prices in the size of their utility bills. Adjusting the thermostat helped, but not a great deal (although this is still recommended). More efficient "direct" measures were needed: insulation, caulking,

GLENDA M, HERMAN is extension Housing Specialist and Associate Professor, North Carolina Agricultural Extension Service. weatherstripping, storm windows, wrapping of water pipes, and having heating systems cleaned. Some families found it paid to invest in a new heating system, or adjust their house to take advantage of a free energy source — the sun.

Other families chose to cope with energy costs by changing cooking and refrigeration styles and equipment, turning down the water heater thermostat, reducing the frequency of baths or showers, exploring better ways to do the laundry, and even adjusting the way fighting and audio-visual equipment were used.

However, the American "romance" with the automobile continues. This has become a drive-in society: movies, banks, dry cleaners, liquor stores, fast-food restaurants, and even churches. The options people choose for their cars are also very costly to operate — air-conditioning, power steering, remote control windows and door locks. There is a lot of talk about organizing and supporting mass transit, carpooling, bicycling and changing driving habits, but do they actually happen? Americans have forgotten how to walk!

"Indirect" energy consumption is basically what's used to produce goods and services. All products available at the market place in some way required energy to manufacture, package, or deliver them. It is this *hidden* energy use that has been so long and easily ignored. Examples are numerous.

Small appliances may not require much direct energy to operate, but they do require a great deal of energy to manufacture. Too often these small appliances are non-repairable, and designed to be tossed out and replaced by newer models. Thus the term "planned obsolescence" evolved.

In the last 20 years, 2-income families have created a need for a revolution in kitchen equipment. Advances have been made in many time- and laborsaving appliances. But if these "labor-savers" begin to cost more in the way of direct and indirect energy, can their continued use be justified?

Each year the amount of energy used to produce, package and deliver food increases. Much of the food we consume reflects high energy costs of the food system.

American families could help control energy costs of food by growing food at home; reducing the use of processed, pre-packaged and convenience foods; and taking into consideration how energy-intensive some of our foods are. This might in turn lead to better diets and a reduction in the need for intensive exercise equipment.

Throw-Away Packaging

A startling example of high "indirect" energy use is packaging of products. Packaging was originally intended to protect and preserve contents. More recently, it has been used to substitute for labor. Self-service department stores and supermarkets use pre-packaged items not only to protect contents, but to speed turn-over, inform and attract buyers, and reduce the number of sales people.

We throw away huge amounts of packaging materials daily. Then, cities or communities must use additional energy to dispose of our garbage.

Demand for "convenience" increases. We ask for and get easy-care floor coverings, tiny calculators, convenience or quick foods, disposables of all types (paper cups and towels, diapers, pop bottles, razors, fountain pens), and gadgets to entertain or substitute for human imagination and energy.

Fabrics used for clothing and home furnishings require energy to produce. Consumers want easy-care, synthetic fibers — possibly not realizing that large amounts of petroleum were required to produce them.

Often direct and indirect energy uses are linked as in the cases of clothing and home furnishings. The choice of light-colored garments along with our standards of cleanliness are directly related to the amount of energy required to produce the garments, the amount of water needed to clean them, and the frequency of cleaning. Darker clothing worn longer could cut this energy use.

The current consumer preference in home furnishings is for large designs or patterns in sofa or chair fabric. Matching of these designs require more fabric. For example: a sofa covered with a plain fabric may use 12 yards while 22 yards of fabric may be needed to match a design. This is not only a waste of fabric, but of energy required to produce the material.

Some families have debated whether to buy a new sofa or have one recovered. Recycling of consumer goods is one way to save money and cut energy needed to produce new merchandise. Understanding these simple concepts can help you make wiser choices and save on energy costs.

The choice of housing is another major area where the average consumer can exert control. It takes thousands of gallons of petroleum products to build just one house. Costs per square foot of living space have increased rapidly in the past year. The choice of smaller houses or multi-family units, or certainly better measures to regulate heating and cooling costs, are necessary considerations of today's family.

A house designed or weatherized to be energyefficient saves its owner in many ways, not the least of which is the direct use of fuel.

Many of the steps to make an existing house more energy-conserving can be done by the homeowner. It does not take much knowledge, skill or time to caulk a window, install weatherstripping, or change a furnace filter. It does take the *will* to do these things.

The family can play a critical role in reducing the demand for energy by re-assessing its living habits. As mentioned earlier, thermostat regulation is an important energy-conserving measure. Yet, people complain when the heat drops below 72° F. It takes a conscious act to go find an extra sweater, put another blanket on the bed, or wrap up in a quilt when reading or watching TV. But, these are ways to save.

The areas of recreational activities and selection of gifts are other ways. One of the most obvious changes taking place is reduction in the use of vans, motor homes, and campers for long distance travel. These eight-mile-per-gallon gas guzzlers are hard to justify.

"At Home" Types of Recreation

Many families are finding "at home" types of recreation can be fun and often less physically exhausting. However, the idea of adding expensive swimming pools or tennis courts is a false sense of savings. Both require great amounts of energy to produce and maintain. Perhaps a better idea would be a community project to fix up a local park or develop community facilities so all could enjoy.

When choosing gifts, consider the amount of energy used to produce the product, the amount of energy the product will use (electric hot dog cooker), and finally, whether the use warrants the energy costs. Most of our homes are full of energy-consuming appliances or toys that may be used only once or twice a year — a child's Christmas toy, for example. Many toys are powered by small disposable batteries, and may be used only a short time before they are discarded

As you and your family consider energy alternatives, try to look at both the direct and indirect use and costs of energy. This may mean more talking together to reach a solution. It may mean making some decided changes in the way your family lives. It will probably mean making some conscious changes in the way your family interacts.

Just how can an American family like yours learn to "live with less energy?" Consider the following steps.

Change attitudes as to personal and family needs.

This first step involves re-examining needs versus wants. Today a growing number of families are finding the value and necessity of a revised lifestyle which includes both "voluntary simplicity" and an "energy-conservation ethic."

Voluntary simplicity should not be confused with "back-to-nature" movements. Rather, it is a lifestyle which calls for self-determination, material simplicity, practicality in both working and living situations, and a way of doing more with less.

An energy-conservation ethic emphasizes conserving now to help provide energy resources for future generations.

The idea that "small is beautiful" may be a place to start. Smaller houses and automobiles would certainly decrease the direct and indirect use of fuel. Living with less does not mean giving up everything — but rather re-adjusting our lifestyles to less size, less "things."

2. Substitute human energy for mechanical.

There are many ways human energy can replace our dependence on fossil fuels.

Walk instead of ride. Air-dry clothes instead of using a clothes dryer. Turn some of your lawn into a garden and grow your own food instead of buying processed, packaged foods. Read a book instead of watching TV. And participate in sports — do not be just a spectator.

Not all these ideas are for everyone, but one or more may appeal to your family. Can you think of others?

The ideas of home production of goods and services, of learning to do many of the things about your house for yourself, of recycling items to a new use, or selecting multi-purpose products all call for the natural human intelligence and energy that Americans have always prided themselves on having in abundance.

3. Adjust time schedules.

Personal and family time schedules may need revision. Try to plan shopping trips to take care of several things at once.

Many utility companies are offering lowered rates for customers who will agree to make changes in the time of day they use power. Energy load management systems such as "peak load pricing" and "time-of-day rates" mean basically the same — dollar savings for energy savings. However, any adjustment in habits requires thought.

4. Select more energy-efficient equipment.

The purpose of the new appliance labels is to help you choose a more energy-efficient appliance. Some of these appliances may cost more initially, but are designed to have lower operating costs. Over a period of years, this should save you energy dollars.

Along with selecting more energy-efficient equipment, we must learn to use equipment better. Why buy an energy-efficient refrigerator and then stand in front of its open door to plan the evening meal?

Apply these same ideas to other products. What is the point of buying an energy-conserving car unless you also reduce the number and frequency of stop-and-go shopping trips, the speed you drive, and make more effort to keep the car in good working order?

5. Search out reliable information.

The concern for energy-saving measures has caused many new businesses to spring up around the country. For the most part, these are good additions to the market place, offering services and products which can help with energy conservation. Examples include insulation and solar companies.

However, as with any new technology, there can be a lack of knowledge and expertise on the part of some of these new business people. The unaware consumer can also be taken in by dishonest individuals out only to make a profit.

The amount of written information on energy is almost more than we can handle. Each day a new book comes out, magazine articles are published, government reports are produced, and TV and radio refer to the energy situation.

How do you judge what is accurate and usable? One recommendation is, do not rely on just one source. Become as informed as possible. Talk with people who have tried new things. Get estimates and check references.

Some of the future sources of help for the consumer include: house doctors trained to analyze energy loss from buildings; Energy Extension Services or one-stop energy centers; the Agricultural or Cooperative Extension Services located in most counties throughout the country; and computers to regulate energy flow in buildings and homes.

Specialists of all types will be able to provide advice and how-to suggestions on ways to live with less energy. However, in the end, you must make the final choice and take an active part.

In summary, the six-letter word ENERGY has and will continue to affect every person in the United States and the world. Our images for the future are somewhat clouded now by uncertainty and the possibility of changes in our "comfortable" way of life. Yet the prospect of a slower pace of life, increased physical labor, and greater community togetherness could enrich American life.

The time for decisions is now. We must either curb our wants, or pay the price.

Further Reading:

Energy: Crisis and Opportunity, #85292, J. C. Penney Company, Inc., 1301 Avenue of the Americas, New York, NY 10019. \$1.25

Focus on Energy and Housing, #5105-7, American Home Economics Association, 2010 Massachusetts Avenue, N.W., Washington, DC 20036. \$5

In the Bank... Or Up the Chimney?, #023-000-00411-9, U.S. Department of Housing and Urban Development, for sale from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. \$1.70.